

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-14 (Canceled).

Claim 15 (New): A catalyst for polymerizing α -olefin, comprising a combination of: a component (A) that is a solid catalyst component comprising magnesium, titanium, and a halogen as an essential component;

OK
OK
enter
OK
6/21/07
a component (B) that is an organoaluminum compound;
a component (C) that is a compound comprising a C(=O)N bond selected from the group consisting of tetramethylurea, tetraethylurea, bis(tetramethylene)urea, N,N'dimethyl-N,N'-diphenylurea, 1,3-dimethyl-2-imidazolidinone, 1,3-dimethyl-3,4,5,6-tetrahydro-2(1H)-pyrimidinone, N,N-dimethylpropionamide, 1,3-diacetyl-2-imidazolidinone, 1-methyl-2-pyrrolidinone, 1-ethyl-2-pyrrolidinone, 1-dodecyl-2-pyrrolidinone, 1-cyclohexyl-2-pyrrolidinone, 1-phenyl-2-pyrrolidinone, and N-methyl- ϵ -caprolactam; and
a component (D) that is a silicon compound or a compound having at least 2 ether bonds.

Claim 16 (New): A production method for an α -olefin polymer, comprising homopolymerizing or copolymerizing an α -olefin by contacting the α -olefin under homopolymerizing or copolymerizing conditions with the catalyst of Claim 15.

Claim 17 (New): A catalyst for polymerizing α -olefin, comprising a combination of: a component (A) that is a solid catalyst component comprising magnesium, titanium, and a halogen as an essential component;